```
Project Name: OPTION 1 TRACK
                   Description: option 1 track alignment
Horizontal Alignment Name: SB TRACK
                   Description: OPTION 1 SB TRACK
                            Style: Default
                                                       STATION
                                                                         NORTHING
                                                                                              EASTING
Element: Linear
                                               2065+00.00
                  POB (
                                                                   1821144.03 6695162.10
            TS ( ) 2065+00.00
TS ( ) 2106+38.05
Tangent Direction: S 44^31'17" E
                                                 2106+38.05
                                                                      1818193.64
                                                                                          6698063.60
                Tangent Length:
                                                      4138.05
Element: Cosine

      2106+38.05
      1818193.64
      6698063.60

      2120+43.42
      1817191.63
      6699049.00

      2126+38.05
      1816752.93
      6699450.64

                   TS (
                  SPI (
                  SPI ( )
                                                  0.00
               Entrance Radius:
                    Exit Radius:
                           Length:
Angle:
                                                     2000.00
                                                    2<sup>02'47"</sup> Right
                  Constant:
Long Tangent:
Short Tangent:
Long Chord:
                                                     7483.31
                                                     1405.36
                                                      594.79
                                                    1999.88
                                                     1999.77
                                 Ys:
                                                        21.24
                                   P:
                                                          3.38
                                   K:
                                                        999.98
            Tangent Direction: S 44^31'17" E
Radial Direction: S 45^28'43" W
Chord Direction: S 43^54'46" E
Radial Direction: S 47^31'30" W
Tangent Direction: S 42^28'30" E
Element: Circular
                                                  2126+38.05 1816752.93 6699450.64
2137+95.07 1815899.55 6700231.94
1797845.41 6678798.63
2149+50.77 1814984.62 6700940.16
                   PI (
                                                 2137+95.07
                   CC (
                   CS (
                                                2149+50.77
                                                  28000.00
4^43'57" Right
                            Radius:
                            Delta:
                                                    0^12'17"
  Degree of Curvature (Arc):
                           Length:
                                                     2312.71
                                                     1157.01
                          Tangent:
                             Chord:
                                                      2312.06
               Middle Ordinate:
                                                         23.87
             23.89

Radial Direction: S 42^28'30" E
Radial Direction: S 47^31'30" W
Chord Direction: S 40^06'32" E
Radial Direction: S 52^15'27" W
Cangent Direction: S 37^44'22"
                        External:
            Tangent Direction:
            Tangent Direction:
Element: Cosine
                                                                   1814984.62 6700940.16
1814514.28 6701304.24
                  CS (
                                                 2149+50.77
                  SPI (
                                                  2155+45.55
                  ST (
                                                 2169+50.77
                                                                      1813372.96
                                                                                          6702124.25
               Entrance Radius:
                                                  28000.00
                    Exit Radius:
                                                   2000.00
                                                          0.00
                        Angle:
Constant:
Tanger+
                                                    2^02'47" Right
                                                     7483.31
                   Long Tangent:
                                                     1405.36
                  Short Tangent:
                                                      594.79
                                                     1999.88
                      Long Chord:
                                                      1999.77
                                 Xs:
                                 Ys:
                                                        21.24
                                   P:
                                                           3.38
                                  K:
                                                       999.98
                                       S 37<sup>44</sup>'33" E
S 52<sup>15</sup>'27" W
S 36<sup>18</sup>'17" E
S 54<sup>18</sup>'13" W
            Tangent Direction:
             Radial Direction:
               Chord Direction:
             Radial Direction:
                                            S 35<sup>41</sup>'47" E
            Tangent Direction:
Element: Linear
                                                  2169+50.77
                                                                      1813372.96
                                                                                           6702124.25
                   ST
                       (
                   TS
                                                   2280+10.37
                                                                       1804391.22
                                                                                           6708577.40
```

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Tangent Direction: S 35<sup>41'47"</sup> E Tangent Length: 11059.60
                               Cosine

TS ( ) 2280+10.37 1804391.22 6708577.40

SPI ( ) 2294+15.73 1803249.89 6709397.41

SC ( ) 2300+10.37 1802754.77 6709727.00

Entrance Radius: 0.00

Exit Radius: 28000.00

Length: 2000.00

Angle: 2^02'47" Right

Constant: 7483.31

Long Tangent: 1405.36

Short Tangent: 594.79

Long Chord: 1999.88

Xs: 1999.77

Ys: 21.24

P: 3.38

K: 999.98

Tangent Direction: S 35^41'47" E

Radial Direction: S 35^05'16" E

Radial Direction: S 56^21'00" W

Tangent Direction: S 33^39'00" E
Element: Cosine
   SC ( ) 2300+10.37 1802754.77 6709727.00
PI ( ) 2347+70.62 1798792.15 6712364.74
CC ( ) 1787239.46 6686418.74
CS ( ) 2394+40.72 1794180.48 6713544.78

Radius: 28000.00
Delta: 19^17'50" Right

Degree of Curvature(Arc): 0^12'17"
Length: 9430.35
Tangent: 4760.35
Element: Circular
                                                                                                                                  28000.00
19^17'50" Right
0^12'17"
9430.35
4760.26
                                Length: 9430.35
Tangent: 4760.26
Chord: 9385.84
Middle Ordinate: 396.08
External: 401.76
Tangent Direction: S 33^39'00" E
Radial Direction: S 56^21'00" W
Chord Direction: S 24^00'05" E
Radial Direction: S 75^38'50" W
Tangent Direction: S 14^21'10" E
                               Cosine

CS ( ) 2394+40.72 1794180.48 6713544.78

SPI ( ) 2400+35.50 1793604.26 6713692.22

ST ( ) 2414+40.72 1792231.19 6713991.77

Entrance Radius: 28000.00

Exit Radius: 0.00

Length: 2000.00

Angle: 2^02'47" Right

Constant: 7483.31

Long Tangent: 1405.36

Short Tangent: 594.79

Long Chord: 1999.88

Xs: 1999.77

Ys: 21.24

P: 3.38

K: 999.98

Tangent Direction: S 14^21'10" E

Radial Direction: S 75^38'50" W

Chord Direction: S 12^54'54" E

Radial Direction: S 77^41'36" W

Tangent Direction: S 12^18'24" E
Element: Cosine
Element: Linear
                                ST ( ) 2414+40.72
TS ( ) 2457+98.83
Tangent Direction: S 12^18'24" E
Tangent Length: 4358.12
                                                                                                                                                                                    1792231.19 6713991.77
1787973.22 6714920.67
Element: Cosine
                                        TS ( ) 2457+98.83 1787973.22 6714920.67
SPI ( ) 2472+04.19 1786600.15 6715220.21
SC ( ) 2477+98.83 1786023.93 6715367.64
Entrance Radius: 0.00
Exit Radius: 28016.50
Length: 2000.00
                                                                                                                                      2000.00
                                                                           Length:
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```
^02'42" Left
                                  Angle:
                                                                7485.52
                              Constant:
                     Long Tangent:
Short Tangent:
                                                               1405.36
                                                                 594.79
                          Long Chord:
                                                               1999.88
                                                                1999.77
                                        Ys:
                                                                   21.23
                                         P:
                                                                     3.38
                                                                  999.98
                                         K:
              Tangent Direction: S 12^18'24" E
Radial Direction: S 77^41'36" W
Chord Direction: S 12^54'53" E
Radial Direction: S 75^38'54" W
Tangent Direction: S 14^21'06" E
Element: Circular
                                                          2509+87.66 1786023.93 6715367.64
2509+87.66 1782934.62 6716158.07
1792968.47 6742509.82
2541+49.15 1780101.96 6717622.53
28016.50
                       SC (
                       PI (
                       CC
                           (
                                                         2541+49.15
                       CS
                           (
                                 Radius:
Delta:
                                                              28016.50
                                                           28016.30
12<sup>59</sup>'13" Left
                                                             0^12'16"
  Degree of Curvature (Arc):
                                Length:
                                                               6350.32
                               Tangent:
                                                                3188.83
                                  Chord:
                                                               6336.74
                  Middle Ordinate:
                                                                 179.73
                             External:
                                                                  180.89
              Tangent Direction: S 14^21'06" E
Radial Direction: S 75^38'54" W
Chord Direction: S 20^50'42" E
Radial Direction: S 62^39'41" W
Tangent Direction: S 27^20'19" E
Element: Cosine
                                                         2541+49.15 1780101.96 6717622.53
2547+43.94 1779573.60 6717895.68
2561+49.15 1778349.04 6718585.23
                      CS (
                     SPI (
                 SPI ( )
ST ( )
Entrance Radius:
                                                           28016.50
                     Exit Radius:

Exit Radius:

Length:

Angle:

Constant:

Long Tangent:

Short Tangent:
                                                                      0.00
                                                            2000.00
2<sup>02</sup>'42" Left
                                                              7485.52
1405.36
                                                                594.79
                                                              1999.88
                          Long Chord:
                                                               1999.77
                                        Xs:
                                        Ys:
                                                                  21.23
                                         P:
                                                                      3.38
             Radial Direction: S 27^20'19" E Radial Direction: S 62^39'41" W Chord Direction: S 28^46'32" E Radial Direction: S 60^36'59" W Tangent Direction: S 29^23'01"
Element: Linear
                                                                                1778349.04 6718585.23
1777967.50 6718800.07
1777967.50 6718800.07
              ST ( ,

EQNBK ( ) 2565+87.02

EQNAHD ( ) A 2566+35.88

TS ( ) A 2599+58.84

Tangent Direction: S 29^23'01" E
                      ST (
                                                           2561+49.15
                                                                                    1775072.03
                                                                                                           6720430.50
Element: Cosine
                                                     A 2599+58.84 1775072.03 6720430.50
A 2613+64.20 1773847.46 6721120.04
A 2619+58.84 1773339.94 6721430.19
                      TS (
                     SPI (
                                                                                    1773339.94
                       SC (
                                                      A 2619+58.84
                  Entrance Radius:
                                                                     0.00
                                                              28016.50
                        Exit Radius:
                                                                2000.00
                                 Length:
                                                               2<sup>02</sup>'42" Left
                                   Angle:
                              Constant:
                                                                7485.52
                       Long Tangent:
                                                               1405.36
                     Short Tangent:
                                                                 594.79
                          Long Chord:
                                                               1999.88
                                                                 1999.77
                                        Xs:
                                                                     21.23
                                        Ys:
                                                                      3.38
```

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K:
                                                999.98
                                        S 29<sup>23</sup>'01" E
           Radial Direction:
Chord Direction:
Radial Direction:
Radial Direction:
          Tangent Direction:
                                        S 60<sup>3</sup>6'59" W
                                      S 29<sup>59</sup>'30" E
            Radial Direction:
                                      S 58<sup>34</sup>'17" W
                                        S 31<sup>25</sup>'43" E
          Tangent Direction:
Element: Circular
                 SC (
                                         A 2619+58.84
                                                              1773339.94
                                                                               6721430.19
                 PI (
                                         A 2666+05.40
                                                                               6723853.08
                                                              1769375.07
                 CC
                                                              1787948.78
                                                                               6745336.38
                                                              1766404.65
                 CS (
                                        A 2711+68.14
                                                                               6727426.20
                                              28016.50
                        Radius:
                                             18<sup>50</sup>'01" Left
                         Delta:
                                              0^12'16"
 Degree of Curvature(Arc):
                        Length:
                                               9209.30
                       Tangent:
                                               4646.56
                         Chord:
                                                9167.89
             Middle Ordinate:
                                                377.55
          External:
Tangent Direction:
Radial Direction:
Chord Direction:
                                                 382.70
                                        S 31<sup>25</sup>'43" E
                                        S 58<sup>3</sup>4'17" W
S 40<sup>5</sup>0'44" E
            Radial Direction:
                                      S 39<sup>44</sup>'15" W
                                      S 50<sup>1</sup>5'45" E
          Tangent Direction:
Element: Cosine
                                                          1766404.65
1766024.42
                                        A 2711+68.14
                                                                               6727426.20
                CS (
                                        A 2717+62.92
A 2731+68.14
                SPI (
                                )
                                                                               6727883.57
                ST (
                                                              1765165.15
                                                                               6728995.64
             Entrance Radius:
                                              28016.50
                  Exit Radius:
                                                    0.00
                        Length:
                                               2000.00
                                              2<sup>02</sup>'42" Left
                        Angle:
                      Constant:
                                               7485.52
                 Long Tangent:
                                               1405.36
                Short Tangent:
                                                594.79
                   Long Chord:
                                                1999.88
                             Xs:
                                               1999.77
                             Ys:
                                                   21.23
                                                    3.38
                              P:
                                                 999.98
                              K:
          Tangent Direction: S 50^15'45" E Radial Direction: S 39^44'15" W
                                      S 51<sup>4</sup>1'58" E
             Chord Direction:
                                      S 37<sup>41</sup>'33" W
            Radial Direction:
                                        S 52<sup>18</sup>'27" E
          Tangent Direction:
Element: Linear
                                        A 2731+68.14
A 2740+55.75
                                                              1765165.15
                                                                              6728995.64
                ST (
                POE (
                                                              1764622.44
                                                                               6729698.01
                                    A 2/40+55.75
S 52^18'27" E
          Tangent Direction:
```

887.61

Tangent Length: